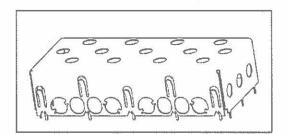
## **Three Approaches to Tooling for Metal Stampings**

Scandic Springs, Inc. by Hale Foote

EMI Shield 4" long X 2" high X 2.5" wide material is .031" thick Martinsite



1

No Tooling: the blanks are made with waterjet or laser,

and then formed with standard press brake tooling.

Possible exceptions: coined or drawn features, or compound radii may need dedicated form tooling.

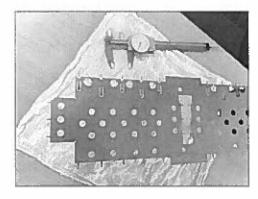
Cost: \$0 tooling, \$10/each for parts in moderate volume

2

Soft tool (a/k/a stage tooling, blank & form tooling):

invest in a stamping tool to make the blank, then form with standard brake press tooling

flat blank stamped before forming; the small fingers might also be formed in the first die



Cost: \$8,000 tooling, \$4/each for parts (this tool cost amortizes in just 1300 pcs)



Hard tooling: one die makes the part complete,

with no labor or handling Cost: \$38,000 tooling, \$0.95/each for parts (this tool cost amortizes in just 4200 pcs)